

# Notice of Allowability

Application No.

10/528,639

Examiner

Richard Chan

Applicant(s)

NILSSON, JOHAN

Art Unit

2618

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/04/07.
2. ☒ The allowed claim(s) is/are 8,13,14,16,24,29,32 and 33.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 8, 13, 14, 16, 24, 29, 32 and 33 are allowed.
2. The following is an examiner's statement of reasons for allowance:

With respect to claim 8, Ling and Munks combined disclose the method as claimed in claim 7, however the prior art does not disclose wherein the PI controller has the transfer function:  $SIR_r = e * K + 1/s \cdot (e * K T_i + e s T_t)$  in which  $SIR_{sub.r}$  is the reference value of the first quality measure,  $e$  is the error in quality measure,  $K$  is a constant,  $e_{sub.s}$  is the tracking signal and  $T_{sub.i}$  and  $T_{sub.t}$  are time constants relating to the integration and tracking unit respectively.

With respect to claim 13, Ling discloses the method as claimed in claim 1, however the prior art does not disclose wherein an adjusted tracking signal is set to zero when the tracking signal is within a predefined value range, the adjusted tracking signal being supplied to the integrating controller in place of the tracking signal.

Claim 14 is dependent on objected to claim 13.

With respect to claim 16, Ling discloses the method as claimed in claim 15, however the prior art does not disclose wherein the integrating controller is operable to

not update the integrator if the tracking signal indicates that the absolute value of the difference between the estimated value of the first quality measure and the reference value of the first quality measure is larger than a threshold.

With respect to claim 24, Ling and Munks combined discloses the controller as claimed in claim 23, however the prior art does not disclose wherein the PI controller has the transfer function:  $SIR_r = e * K + 1/s * (e * K T_i + e s T_t)$  in which  $SIR_{sub.r}$  is the reference value of the first quality measure,  $e$  is the error in quality measure,  $K$  is a constant,  $e_{sub.s}$  is the tracking signal and  $T_{sub.i}$  and  $T_{sub.t}$  are time constants relating to the integration and tracking unit respectively.

With respect to claim 29, Ling discloses the controller as claimed in claim 17, however the prior art does not specifically disclose wherein the tracking unit is operable to produce an adjusted tracking signal which is set to zero when the tracking signal is within a predefined value range, the adjusted tracking signal being applied in place of the tracking signal.

Claim 30 is dependent on objected claim 29.

With respect to claim 32, Ling discloses the controller as claimed in claim 31, however the prior art does not specifically disclose wherein the integrating controller is operable to not update the integrator of the tracking signal indicates that the absolute

value of the difference between the estimated value of the first quality measure and the reference value of the first quality measure is larger than a threshold.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chan whose telephone number is (571) 272-0570. The examiner can normally be reached on Mon - Fri (9AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richard Chan  
Art Division 2618  
12/8/07



  
**NAY MAUNG**  
**SUPERVISORY PATENT EXAMINER**